

**Patterns of formation and localization of kaolinic - fire clays of Azerbaijan I.J.ALIYEV,V.R.  
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Kaolinic - fire clays fields of Azerbaijan are mainly located in Lok-Garabagh and partially in Nakhchivan tectonic-magmatic zones. Jurassic and partially Cretaceous periods of Lesser Caucasus northeast part can be characterized by intensive volcanism and powerful complex of effusive rocks formed as a result of this volcanism, it is a place-container for many economic minerals including fields of Kaolinic-fire raw.

In Shamkir anticlinorium fields formation and these clays manifestation is mainly connected with lava facies of the Upper Bajocian volcanism which is represented by quartz plagioporphries, their tuffs and tufobreccia, rhyolites, ryodacites and so on. In areas with fields distribution (Chardakhly, Gotul, Chovdar group) rocks-container are cut by steeply falling tectonic failures. Along faults hardly crushed breccia rocks were subjected to intensive metasomatic changes-process of quartzing, kaolinitization and seritization.

Within Geygol uplift fields of Kaolinic-fire clays are confined to the Upper Bajocian quartz plagioporphries (Poladbulag) and Coniacian series of rhyolites and their tuffs (Garabulag).

In Adjakend trough along failures of northeast extension zones of Kaolinized and alunitized rocks (Khanlar and Mirziki field) formed as a result of metasomatic changes of the Cretaceous volcanites-andesites and lithoclastic tuffs. Within Nakhchivan folded area Kaolinic formation is caused by diagenetic changes of the Middle Eocene pyroclasts and hydrothermal-metasomatic reprocessing of Lower Eocene lavopyroclastic formations. Study of Kaolins showed in Azerbaijan excepting trasslike stratum in Kolan-Gyshlag field of Nakhchivan folded area formation of Kaolinic-fire clays deposits of all fields is caused by processes of hydrothermal-metasomatic transformations of acid and medium volcanic rocks under influence of solvate and acid thermal waters connected with postmagmatic activity of acid magma subvolcanic facies. *Keywords: Kaolin, anticlinorium, volcanism, metasomatik, quartzing*

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### **Azerbaycan kaolinik ates. killerinin oluþum ve lokalizasyon modelled**

Azerbaycan'm kaolinik ates kili sahalan esas olarak Lok-Garabagh ve kısmen de Nahcivan tektonik-magmatik zonlarmda konumlamr. Asagi Kafkaslar kuzeydogu bolumilnde Jura ve kısmen de Kretase donemleri yogun volkanizma ve bu volkanizma sonucunda olusmus olan yilzeyde katilasan (efilsiv) kayaclar karmasigi ile karakterize edilir; bolge, kaolinik ates kili hammaddesi de dahil, 90k sayida ekonomik kaynagi icrerir.

Shamkir antiklinoryum sahasmm olusumu ve bu killerin varhgi, esas olarak, Gee Bajosiyan volkanizmasi lav fasiyesi ile ilintilidir; bu volkanizma kuvars plajiyoporfirler, bunların tilfleri ve tufobresi, riyolitleri, ryodasitleri vd ile temsil edilir. Bu sahalann dagilim alanlannda (Chardakhly, Gotul, Chovdar grubu), kayac topluluklan dik dalimh tektonik kiriklarla kesilir. Bu kinklar boyunca yogun bicimde ezilmis bresik kayaclar, yogun metasomatik degisim silreci, kuvarslasma, kaolinlesme ve serisitlesme etkisi altinda kalmislardrr.

Goygol'daki yuksel(til)mis kaolinik ates kili sahalan Gee Bajosiyan kuvars plajiyoporfirleri (Poladbulag) ve Koniasiyen yasli riyolit ve riyolitik tilf serileri (Garabulag) ile simrhdır.

Adjakend teknnesinde kuzey yayılma zonu fayları boyundaki kaolinlesmis ve aliinitlesmis kayaclar zonu (Khanlar ve Mirziki sahalan), Kretase yasli volkanitler-andezitler ve litoklastik tilflerin metasomatik degisimi sonucunda olusmustur.

Nahcivan kivnm alamnda kaolin olusumunun nedeni, Orta Eosen piroklastiklerindeki diyajenetik degisimler ve Alt Eosen lavları ve piroklastik olusuklarla hidrotermal-metasomatik siireclerle yeniden islenmesidir.

Kaolinler konusundaki calisma, Azerbaycan'da, Nahcivan kivnm alamndaki Kolan-Gyshlag volkan killil katlari haric, tilm sahalardaki kaolinik ates kili yataklarının olusum nedeninin, magmatizma sonrasmdaki asidik magma sub-volkanik fasiyesi faaliyeti ile baglantili cozeltilerin (solvatlar) ve

termal sularin etkisinde kalan asidik ve ortac volkanik kayaclarm hidrotermal-metasomatik donusilm siirecleri oldugunu gostermistir. *Anahtar Kelimeler: Kaolin, antiklinoryum, volkanizma, metasomatik, kuvarslasma*